

In-house EVM Workshop

Defense Systems Management College

Ft. Belvoir, Virginia

June 22-23, 1999

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Objectives

- Identify issues and obstacles to the effective use of EVM on in-house projects
 - Develop list of recommendations and solutions
- Share best practices and lessons learned

Agenda

Day 1 – Tuesday, June 22, 1999

Opening remarks and administrative information	8:00 – 8:15
OSD Perspective – Gary Christle	8:15 – 9:00
“A View from the Field” – selected speakers	9:00 – 10:00
Break	10:00 – 10:15
Form topic discussion groups	10:15 – 10:30
Topic discussions	10:30 - 11:30
Lunch – Ft. Belvoir Officers Club	11:30 – 1:00
Topic discussions	1:00 – 4:30
Daily wrap-up	4:30 – 5:00

Agenda - cont.

Day 2 – Wednesday, June 23, 1999

Topic discussion	8:30 – 11:30
Lunch - roundtable software discussion	11:30 – 1:00
Topic discussions	1:00 – 2:00
Break (reconvene in Bldg. 292)	2:00 – 2:15
Topic debriefs	
# 1 Validation and Surveillance – Bill Gibson	12:15 – 2:45
# 2 Implementation Considerations – Tom Bryant	2:45 – 3:15
Break	3:15 – 3:30
# 3 Accounting Systems – Mark Zenthoefer	3:30 – 4:00
# 4 Data Analysis and Training – Susan Wood	4:00 – 4:30
Wrap-up	4:30 – 5:00

Other Activities

■ Tuesday - Luncheon Presentation

- Speaker: Rob Robbins (F-14 PMO)
- Place: Ft. Belvoir Officers Club
- Time: 11:30- 1:00
- Cost: \$12.50 for all-you-can-eat buffet

■ Wednesday - SW Roundtable Discussion

- Host: Dave Melton
- Place: Classroom #73, Building 207
- Time: 11:30 - 1:00
- Lunch available at the cafeteria in Building 207

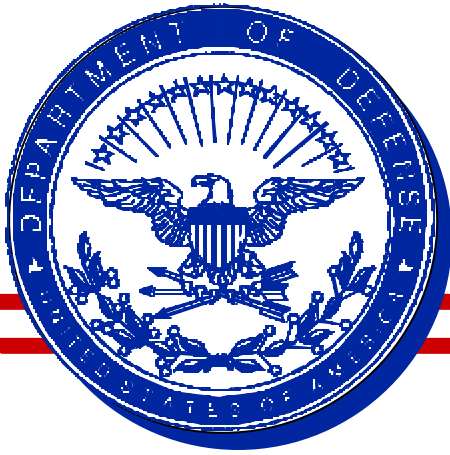
Administrative Information

■ Messages

- Voice messages: 703-805-2848
- Email messages: waelchli@dsmc.dsm.mil
- Faxes: 703-805-3184

■ Cafeteria

- Located in Building 207
- Hours: 6:30 AM to 1:30 PM daily



Earned Value

**A Manager's Tool for Integrated
Cost, Schedule and Technical
Performance Management**

OUSD(A&T)SA/PM



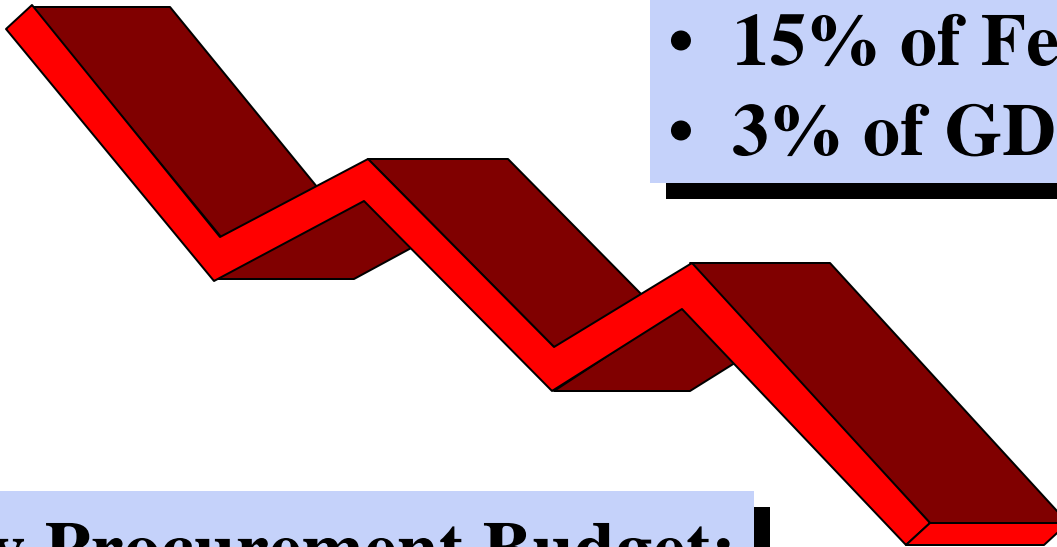
1961 Pentagon Spending:

- 40% of Federal Budget
- 8% of GDP

1997 Pentagon Spending:

- 15% of Federal Budget
- 3% of GDP

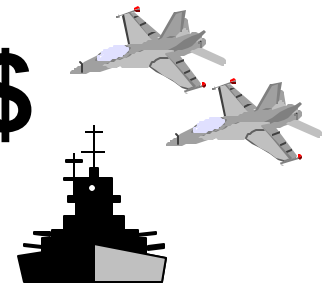
\$\$\$



Military Procurement Budget:

- Down 67% since 1985 peak
- \$60 Billion goal

\$



The 1990's - Shrinking Industrial Base

Lockheed
GD Mil. Jets
Sanders Assoc.



Lockheed

Martin Marietta
GD Rockets
GE Aerospace



Martin Marietta

Loral
Unisys Defense
IBM Fed. Systems
LTV Missiles



Loral

Ford Aerospace
Goodyear Aerospace



Northrop
LTV Aircraft
Grumman
Westinghouse Def



Boeing
Rockwell Def & Space
McDonnell Douglas



Raytheon
E-Systems
Texas Instruments Def



Hughes Aircraft
Magnavox Def
CAE Link
GD Missiles



Boeing

**Rockwell Def & Space
McDonnell Douglas**



Northrop Grumman

Raytheon

Texas Instruments Def

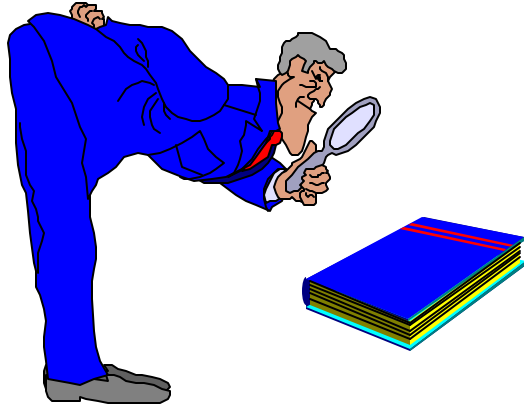


Hughes Aircraft

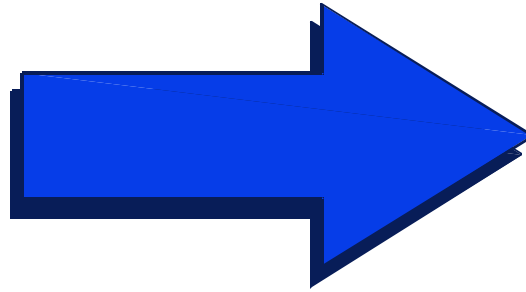
Raytheon

Reengineering EVMS

October 1993 - A Vision



Inspection



Management



Earned Value Management: Implementation Problems

- “Financial Management”
- Audit-like reviews
- **Reporting** focus
- Too many “surprises”
 - ◆ **A-12** (Navy)
 - ◆ **AAWS-M** (Army)
 - ◆ **C-17** (Air Force)
- Challenge: **keep good principles, stop bad practices**



Lesson of the A-12

The “Beach” Report, A-12 Administrative Inquiry, 28 Nov 1990

- Too often, earned value insights remain the sole province of the supporting program control staff of both contractors and the government.
 - ◆ Earned value must be an **integral** part of the performing design and manufacturing organizations.
 - ◆ Only when **program technical staffs** are held accountable for earned value analysis, will they begin to understand its implications.

The Need For Change:

C/SCSC never had a chance!

- **RFP Review Results 1991 - 1993**
- **Significant misapplication of requirements**
 - ◆ 50% have WBS problems
 - ◆ 75% have excessive variance reporting requirements

Unnecessary Cost

December, 1994, Coopers & Lybrand/TASC Study:

**“The DoD Regulatory Cost Premium:
A Quantitative Assessment”**

and

**COST/SCHEDULE CONTROL SYSTEMS
(C/SCS)**

C&L/TASC Cost Drivers:

Cost without a requirement

- **Total DoD Cost Premium is 18%**
- **C/SCS Cost Premium is 0.9%**
 - ◆ Nearly 3/4 is in Eng'g/Prog Mgmt
 - Written control account variances
 - ◆ Most of Remainder is in administrative and external reporting activities

Good idea, bad implementation

(C&L/TASC Cost Drivers)

- “In general, **industry views** the general framework and principles of cost/schedule reporting **positively**.
- However, all contractors subject to C/SCS agree that, **as currently required** by DoD, cost/schedule reporting is **too detailed, repetitive, and voluminous** to be used effectively as a management tool by either the government or industry...”

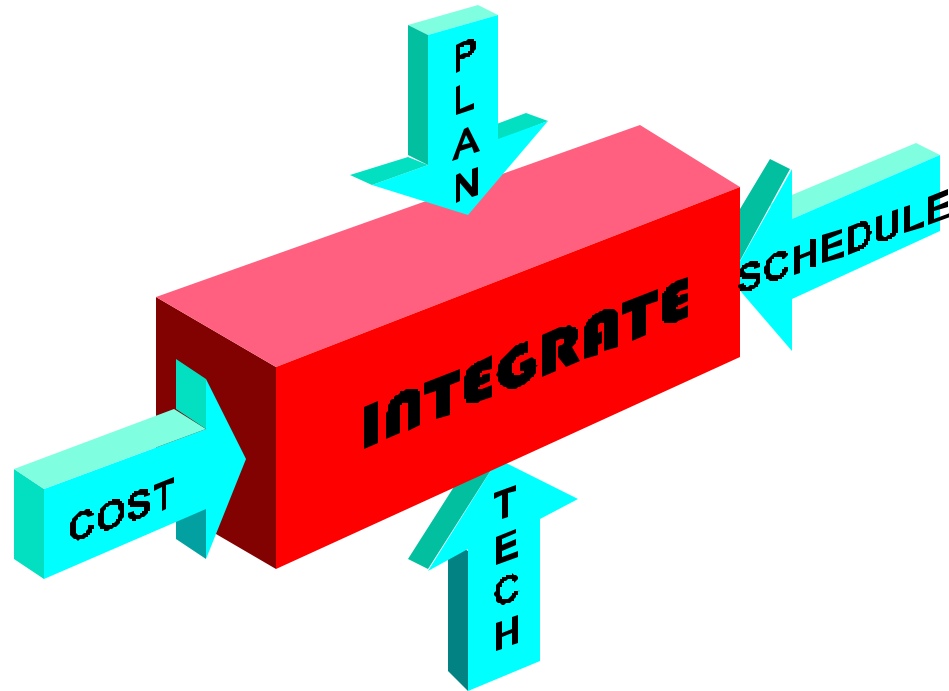
The paradigm must change

- **EVMS** reporting system is of little value;
- **Program Management**, not audits;
- **The Vision:**
 - ◆ The quality of a contractor's management system is determined
 - ◆ not by the absence of defects,
 - ◆ but by the presence of management value.

Services & industry Challenged Implement “Model Program”

- Initiated Oct 93
- Shift Ownership From Financial Management to **Program Management**
 - ◆ Change emphasis from government system to contractor systems
 - ◆ Reduce the review burden
 - ◆ Limit reporting
 - ◆ Ensure comprehensive **planning** and common understanding of the task
 - ◆ **Integrate** cost, schedule, technical performance, and risk management

The Acquisition Executives Take Charge



INTEGRATED PROGRAM MANAGEMENT INITIATIVE

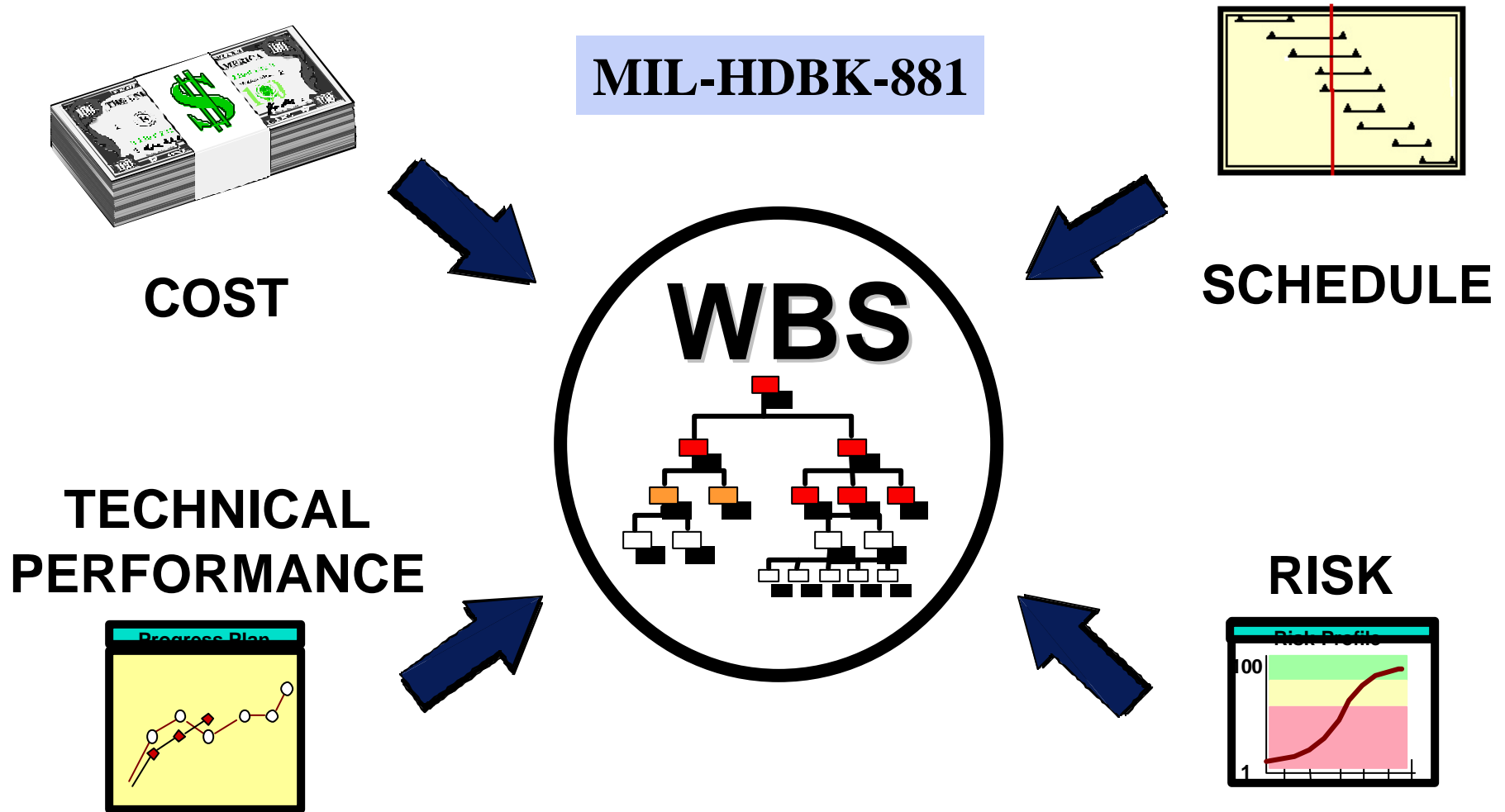
September 1994

Key Building Blocks

Integrated Program Management Initiative

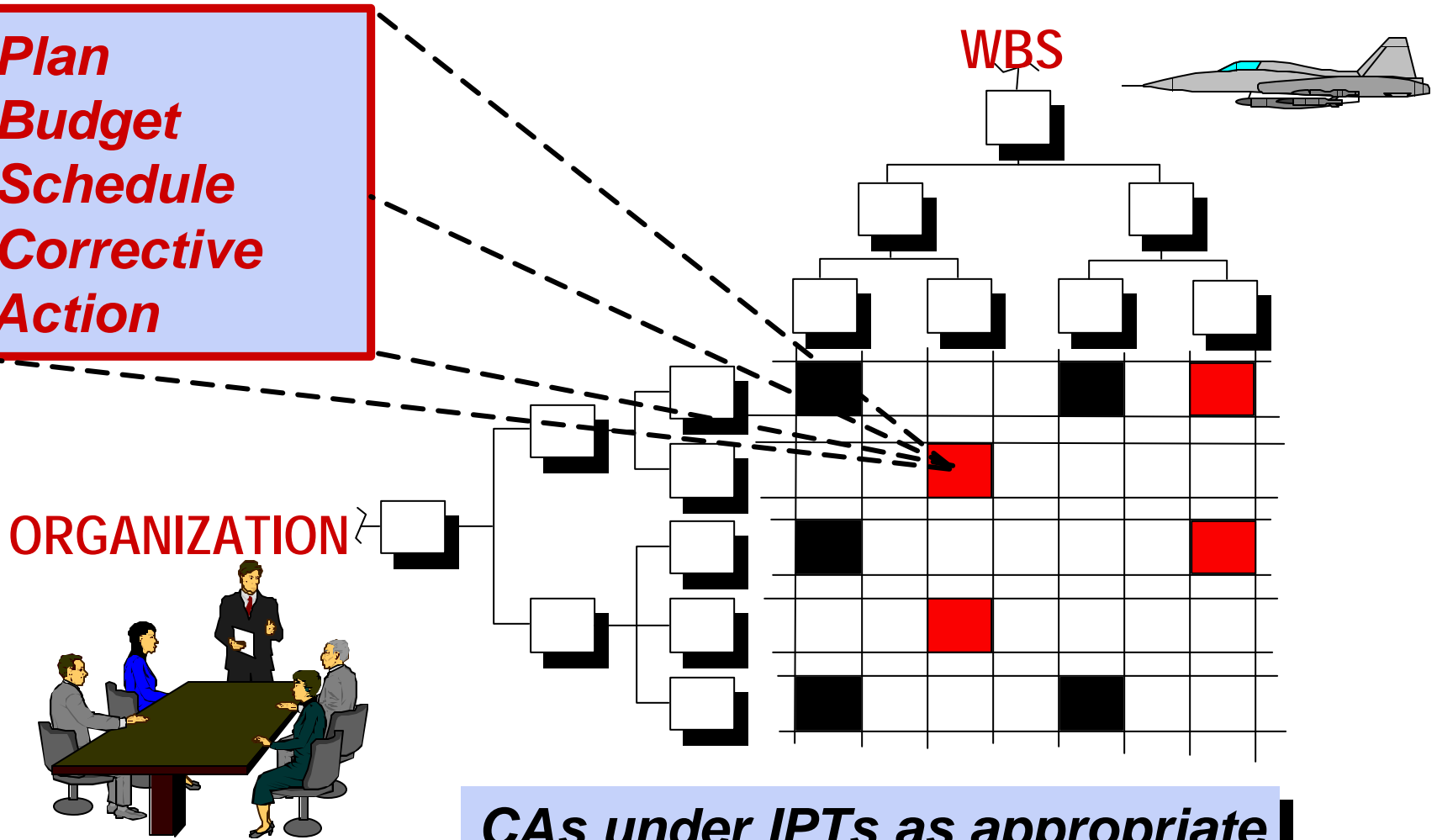
- **Model Program Objectives**
- **WBS**
- **IPTs**
- **Integrated Baseline Review (IBR)**
- **“Right Size” Reporting**
- **Integrated Digital Environment**
- **Training**

Work Breakdown Structure: The Key to Integration



The Control Account: Where the Action is

- ***Plan***
- ***Budget***
- ***Schedule***
- ***Corrective Action***



CAs under IPTs as appropriate

Reengineering EVM: Integrated Baseline Reviews

- Within 6 months of award

- Mutually understand plan

- ◆ Scope
- ◆ Schedule
- ◆ Resources

} **Risk**

- Planning process vs. event

- PM leads

- ◆ EVM staff supports
- ◆ Management system reviews effectively eliminated

IBR Training

- Schedules
- Mgmt. Systems



Growing Consensus:

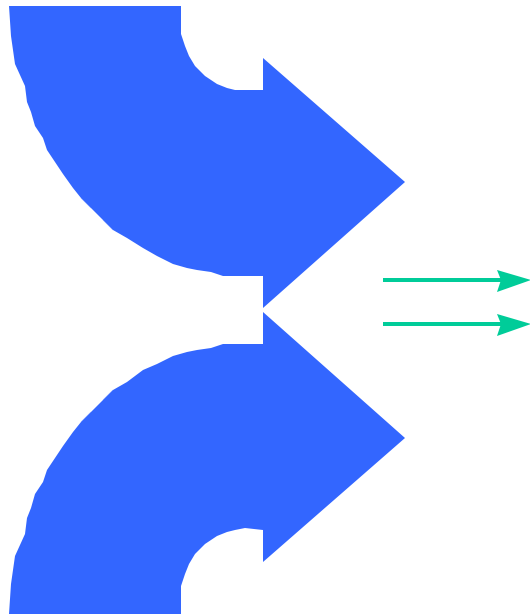
Gov't/Industry Best Practice

- **Dec. '96 DoD accepted industry EVMS guidelines as C/SCSC replacement**
- **Reserved right for government reviews**
 - ◆ **As determined by project manager**
 - ◆ **"Self-certification" not in public interest**
- **Encouraged "true" standard**
 - ◆ **ANSI/EIA 748-98 EVMS issued in 1998**
 - ◆ **DoD and industry EVMS criteria are equal**
 - ◆ **International discussions - Australia, Canada, UK, US**



Earned Value Management: Origins

Industry Best
Practices



1967: DoD Instruction 7000.2

CANCELED

Criterion-based Management

- Brief statements of attributes
- Not “how-to manage”
- Not a system
- Minimum acceptable standard

1997: DoD Regulation 5000.2-R

**32 Earned Value Management
Systems (EVMS) Criteria**

Government
Requirements

DoD Since 1993... Results!

● DoD EVM

- ◆ Value reaffirmed
- ◆ Shifted to Industry; DCMC Exec. Agent
- ◆ OMB policy
- ◆ Trilateral MoU
- ◆ Intl. Perf. Mgmt. Council
- ◆ Commercial
- ◆ In-house
- ◆ Prof. associations
- ◆ Adopted by NASA, FAA, NRO, FBI, CoE
- ◆ Enterprise-wide
 - Boeing
 - Raytheon
 - Lockheed Martin
 - and others...
- ◆ No major surprises

Aggregate overrun 5.5% (\$1.2B on \$72.8B; 66% comp.)

They're even doing it in industry!

- **Industry**

- ◆ Boeing Defense & Space Group
- ◆ Lockheed Martin Sunnyvale
- ◆ McDonnell Douglas
- ◆ Motorola Iridium tm
- ◆ Navistar
- ◆ Delta Airlines
- ◆ Delco Electronics
- ◆ Industry "Standard"
 - ANSI

- **Project Management Institute**

In-house Workshop Tasks

My Opinions

- **Validation & Surveillance**

- ◆ Policy changes?
- ◆ Who performs?

- **Implementation**

- ◆ Can in-house meet all 32 criteria?

- **Accounting Systems**

- ◆ Are DoD, non-CAS systems compliant?

- **Data Analysis & Training**

- ◆ Do PMs need EV data?

Earned Value Management Systems

Basic requirements

- **COMPREHENSIVE PLANNING PROCESS**
 - ◆ Covers entire statement of work
 - ◆ Schedules activities
 - ◆ Allocates resources
- **FULLY INTEGRATED MANAGEMENT SYSTEMS**
 - ◆ Scheduling systems integrated with one another, and with work authorization system, accounting system, MRP, work measurement system, etc. For example:
 - Interdependencies between department, functional, and/or IPT schedules (horizontal integration)
 - Interdependencies from lowest level to master schedule (vertical integration)

VISION

**The quality of a contractor's management system
is determined not by the absence of defects,
but by the presence of management value**

NAVAL AVIATION SYSTEMS TEAM



**Earned Value Management
in the Naval Aviation Depot Environment**



Why Earned Value Management?

- AIR-00 Monthly Question “How are we doing?” i.e. Aircraft Deliveries to the Fleet Customer
- Current Metrics
 - “Reporting of History”
 - Financial Completions, months past delivery
- Future Metrics
 - “Reporting In Process Status and Projecting the Final Outcome.”
 - Forecast future deliveries based EAC calculations



EVM Recipe for Success

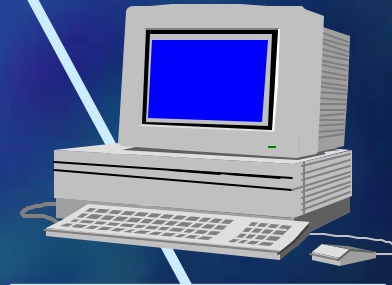
**NAVAIR
Business Process
Reengineering
(BPR)**



Business Processes



**Organization
Relationships**



**Information
Technology**



Business Processes

- Challenge of changing processes
 - How to move from “As Is” to “To Be”?
 - “As Is”
 - Functional stovepipes focused on sub-optimized processes
 - “We’ve always done it this way”!
 - “To Be”
 - Integrated
 - PLANNING
 - SCHEDULING
 - EXECUTION
 - PERFORMANCE MEASUREMENT



Organization Relationships

- Eliminate functional stovepipes
- Establish independent profit & loss cost centers
 - By product line, by NAVAIR IPT
 - Process Centric (EVM/ABM)
 - Single Project Manager
 - Budget Authority
 - Negotiated resources



Information Technology

■ Current Environment

- Multiple Project Management Tools
- No functional baseline or standards
- Emotional ties to favorite software

■ Changes

- Single set of software tools
- Allocated functional baseline
- Standard data and reporting



Conclusion

- Change management
 - Significant effort expended on changing:
 - Minds
 - Attitudes
 - Shifting organizational behavior
 - *It's more emotional than technical*



*“Strangely enough, this is the past
that somebody in the future is
longing to go back to.”*



OSD
In-House
Earned Value Management
Workshop
22 - 23 June 1999



Table of Contents

- **EVM In-House Workshop Findings**
- **Lessons Learned**
 - **Implementation Considerations**
 - **System Validation**
 - **System Certification**
 - **System Surveillance**
 - **Training**
 - **Government Accounting**
 - **Management Information System**
- **Workshop Recommendations**

EVM In-House Workshop Findings



- **EVM implementation within DoD further along than perceived**
- **Direction reaffirmed**
 - **Need to Clarify In-House effort**
 - **DODI 5000.2R**
 - **Update EVMIG**
- **System validation not mandatory for EVM implementation**
- **Standard tool set recommended**



Lessons Learned Implementation Considerations

- 1. Insufficient implementation guidance on EVM**
 - Culture change required.**
 - How to fund implementation.**
- 2. Education and training**
 - Funds vs. budget**
- 3. Timing of funding**
- 4. Need contract / work authorization document.**
- 5. Modifying legacy system may not be the way to go.**
- 6. “Customer Management”/Baseline Management**
 - PEO/PMO must change how business is transacted**
- 7. Management Incentives**



Lessons Learned System Validation

- **Must comply with 32 criteria**
- **Must have DoD acceptance**
 - **DCMC: Validating Agent**
 - **Limited resources focused on contractors**
 - **Buying Command: No authority**

Lessons Learned System Certification



- **Must comply with 32 criteria**
- **DoD Acceptance not required**
 - **Buying Command can be Certifying Agent**
 - **Certification valid only within component**
 - **DCMC: Consultant**

Lessons Learned System Surveillance



- **Self Surveillance**
 - **In-House staff: Primary responsibility**
 - **PEO / Program Office Staff: As required**
 - **DCMC Assistance: Upon request**
- **Types of surveillance:**
 - **Program**
 - **System**
 - **SPC metrics - “system health analysis”**



Lessons Learned Training

- **Target audiences**
 - No “one size fits all”
 - Integrate training
 - Scope, schedule, budget/funds
- **Web-based and on-site instruction**
- **Train the trainers**
- **Procedural training**
- **On the Job**
- **Continuing education**



Lessons Learned Government Accounting

- **Intent of EVM Accounting Criteria based on compatibility with DoD Directive 5000.1b**
- **Accounting system acceptance subject to certification vs. validation requirements**

DoD Directive 5000.1b

g. Management Control

...”In implementing internal management control systems, managers should focus on results not process.”

Lessons Learned Government Accounting



- **Budget vs. Costs**
 - **Must separate revenue (funding document) from expense (project costing)**
 - **Color of money doesn't affect scope**
 - **May be helpful to keep revenues at summary level in accounting interface**
- **Materials**
 - **WIP: Cannot usually pull ACWP from financial system -- parts purchase doesn't equal parts usage**
 - **Must use estimations of issuance or track on shop floor**



Lesson Learned Management Information System

- **Accounting system must have three purposes**
 - **Data Storage / Accounting Interface**
 - **Incremental vs. cumulative**
 - **By element of cost**
 - **Data accessible at least monthly**
 - **Job Cost Accounting**
 - **Financial Management**
 - **Project Actuals**
 - **Funds / Revenue**



Lesson Learned Management Information System

- Recommended Process Owners**

<u>Function</u>	<u>Belongs to</u>	<u>Influenced by</u>
Data Storage / Accounting Interface	Comptroller	
Job Cost Accounting	Comptroller	Project Manager
Financial Management		
Project Expenses	Project Manager	
Funds/Revenue	Project Manager	Comptroller



Workshop Recommendations

- 1. Form PMAC Working Group to resolve Depot and Logistics issues.**
- 2. Need OSD “In-House” Web Site/Deskbook Reference**
 - Best Practices**
 - Lessons Learned**
 - POC: Type of Effort, Location, Office, Phone No, E-mail**
 - Training References**
 - Tool Sets**



NADEP Jacksonville Earned Value





NADEP Jacksonville Earned Value



- The Naval Aviation Depot is an industrial facility within the NAVAIR corporation
- “Depot” level rework is performed on aircraft, engines and components



NADEP Jacksonville Earned Value



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

'95

Start Impl.

EV Training

System Rqmts.

'96

System Rqmts.

Readiness
Review

'97

Validation Review System
Acceptance

'98

Re-Design
Decision

Integrated
Baseline Review

Critical Design
Review

'99

In-House EVM
Workshop

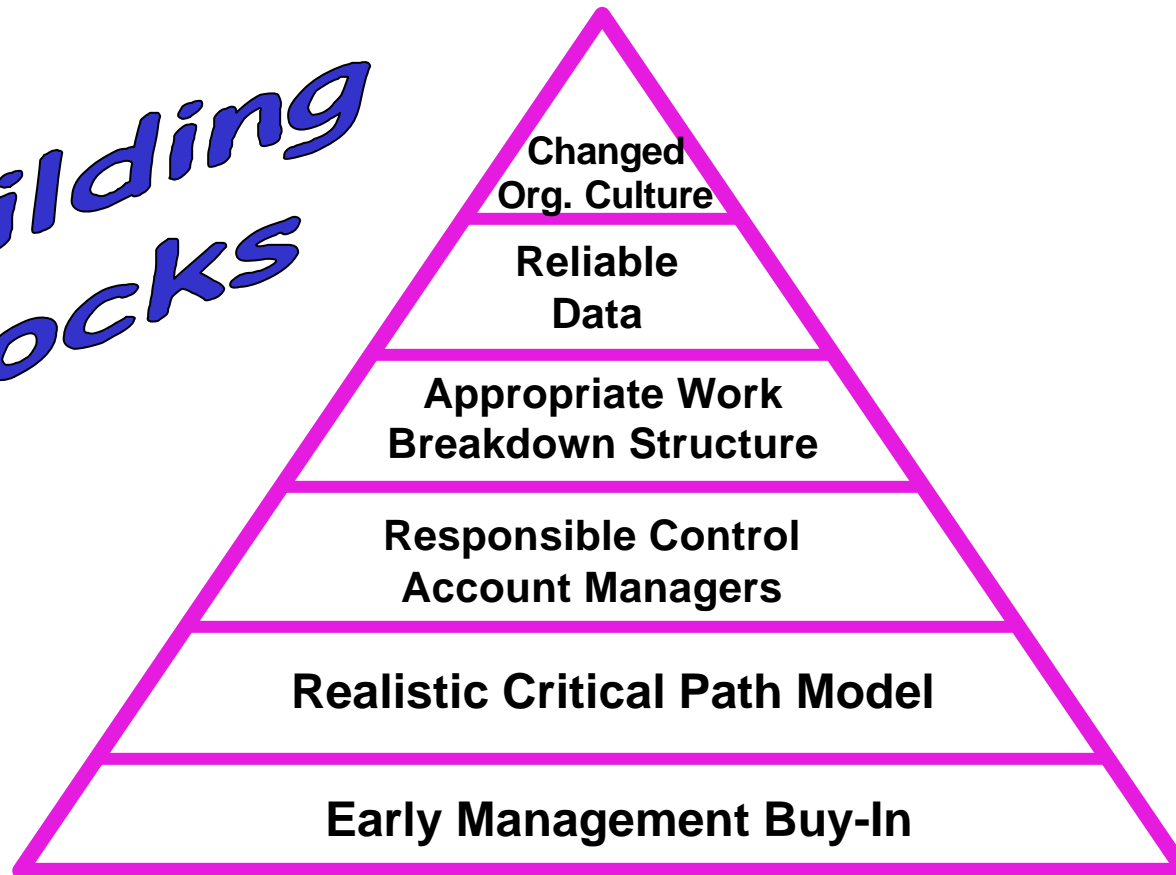
MRPII
Integration



NADEP Jacksonville Earned Value



*Building
Blocks*

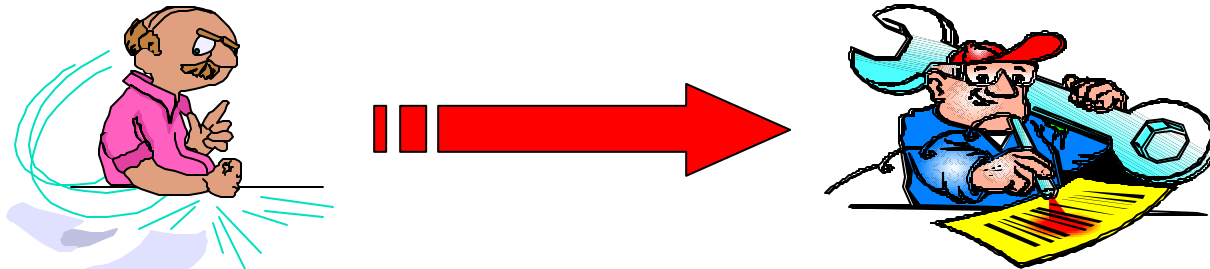




NADEP Jacksonville Earned Value



- *Early Management Buy-In*
 - Understanding. . .
 - what EV is and the benefits
 - the process and resource requirements
 - customer requirements
 - the integration with other management initiatives





NADEP Jacksonville Earned Value



Current Environment

Earned Value

**Tailored Pricing/
Scheduling**

**CA
Studies**

- Matl Mgmt
- Admin
- Tech Data

ERP

MRPII

BPR

- Matl Mgmt
- Planning/
Scheduling

**ISO
9000**

Daily Operations

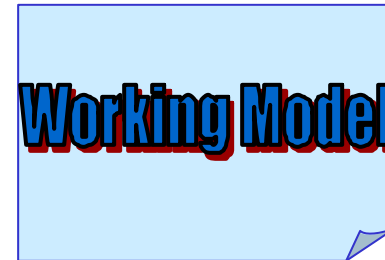
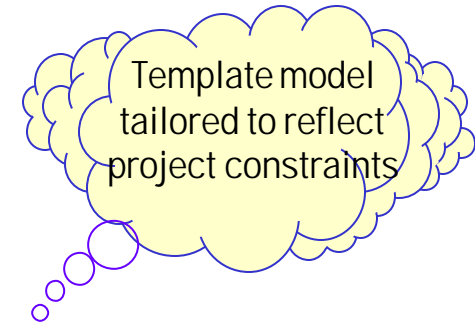


NADEP Jacksonville Earned Value



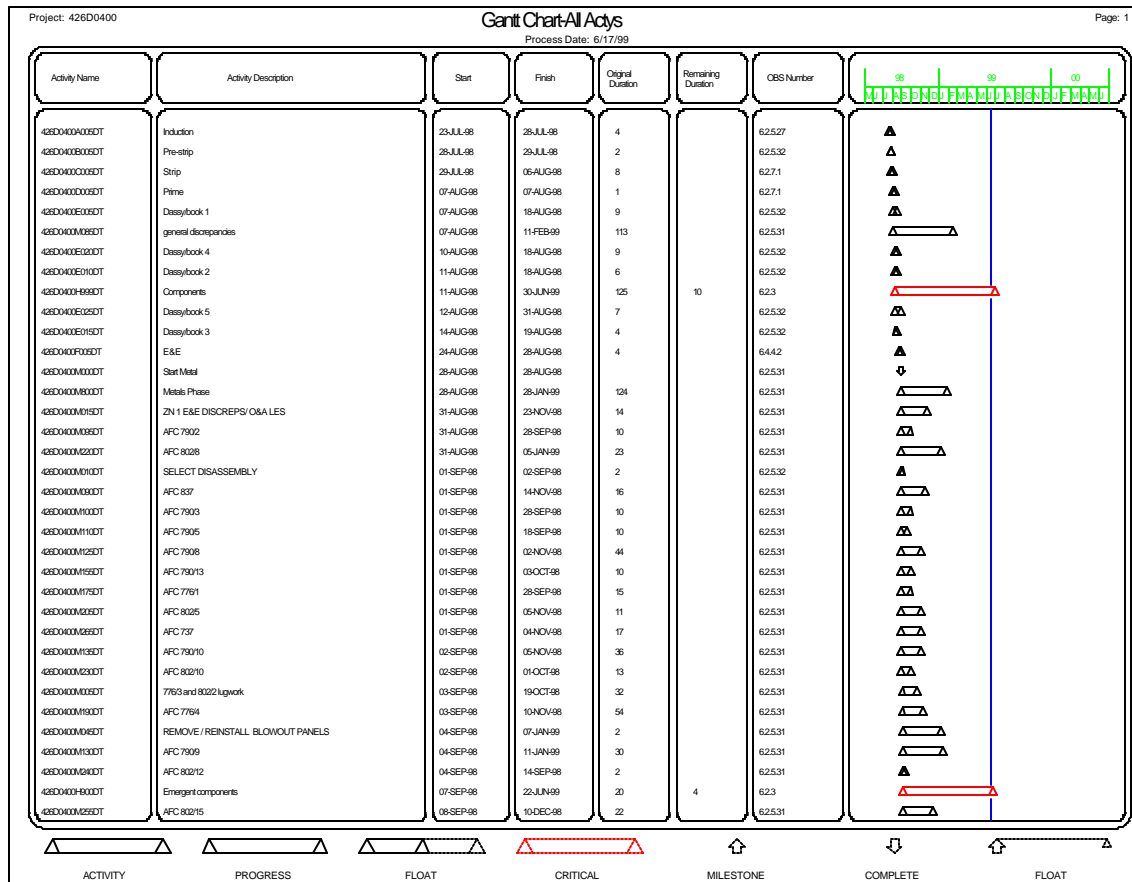
- *Realistic Critical Path Model*

- Measurable activities which relate to the work to be accomplished
- Production input
- Relationships drive the schedule





NADEP Jacksonville Earned Value



Time-
Phased



NADEP Jacksonville Earned Value



- *Responsible Control Account Managers*



Responsible Organization
(General Foreman)

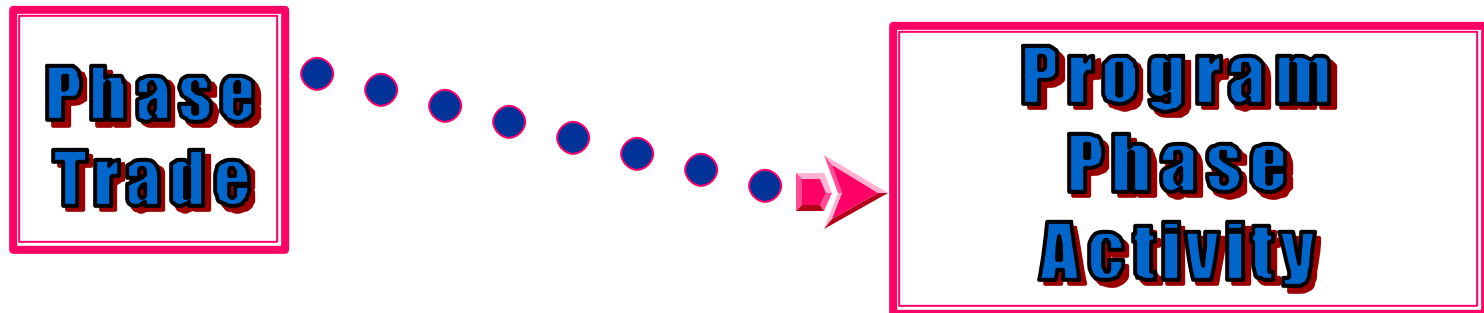
- Performing Organization #1
- Performing Organization #2



NADEP Jacksonville Earned Value



- *Appropriate Work Breakdown Structure*
 - Must relate to production-based activities





NADEP Jacksonville Earned Value



Meaningful
Variance
Analysis

Dekker TRAKKER ABCMS

File Edit View Tools Options Forms Help

426D0400 (None)

Report Designer - trk22492.frx - Page 1

Project: 426D0400
Report Name: ODC UNIVAR/A
Planned By: LCDR STERRETT

**Cost Cumulative Variance
DETAILED VARIANCE (\$\$\$)**

Run Date: 09/21/1999
Run Time: 15:50
Status Date: 09/17/1999
Form: R650000

Summary Key	BCWS	BCWP	ACWP	Schedule Variance	Cost Variance	Budget At Completion	Estimate At Completion	Variance
426D04000050T Induction	\$1,757	\$0,000	\$0,000	\$1,757	\$1,757	\$1,757	\$1,757	\$0,000
426D04000050T Pre-Ship	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000
426D04000050T S/M	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000
426D04000050T Prime	\$1,500	\$1,500	\$1,500	\$0,000	\$0,000	\$1,500	\$1,500	\$0,000
426D04000050T Dassybook 1	\$21,219	\$20,459	\$115,000	\$-780	\$-93,541	\$21,219	\$115,000	\$-93,780
426D040000100T Dassybook 2	\$10,791	\$10,791	\$10,791	\$0,000	\$0,000	\$10,791	\$10,791	\$0,000
426D040000150T Dassybook 3	\$0,249	\$0,249	\$0,249	\$0,000	\$0,000	\$0,249	\$0,249	\$0,000
426D040000200T Dassybook 4	\$15,300	\$15,300	\$15,300	\$0,000	\$0,000	\$15,300	\$15,300	\$0,000
426D040000250T Dassybook 5	\$2,447	\$2,447	\$2,447	\$0,000	\$0,000	\$2,447	\$2,447	\$0,000
426D04000050T ESE	\$24,377	\$14,789	\$24,385	\$-9,588	\$-9,596	\$24,377	\$24,385	\$-8
426D040000020T Discrepancies	\$10,790	\$10,790	\$10,790	\$0,000	\$0,000	\$10,790	\$10,790	\$0,000
426D040000050T Subs/Fine/Rudders	\$12,000	\$12,000	\$12,000	\$0,000	\$0,000	\$12,000	\$12,000	\$0,000
426D040000070T Assy - Emergent	\$4,000	\$20,000	\$20,000	\$16,000	\$16,000	\$4,000	\$20,000	\$16,000
426D040000100T Engine Bays/Spansions	\$12,515	\$12,515	\$1,700	\$-10,815	\$10,815	\$12,515	\$1,700	\$10,815
426D040000150T Hydraulics/Speed Bra	\$4,700	\$4,700	\$4,700	\$0,000	\$0,000	\$4,700	\$4,700	\$0,000
426D040000200T Landing Gear	\$115,770	\$115,770	\$115,770	\$0,000	\$0,000	\$115,770	\$115,770	\$0,000
426D040000250T Wings/Birdcages	\$10,125	\$10,125	\$10,125	\$0,000	\$0,000	\$10,125	\$10,125	\$0,000
426D040000300T Gun/Drum	\$1,517	\$1,517	\$1,517	\$0,000	\$0,000	\$1,517	\$1,517	\$0,000
426D040000350T Ramps/Cloak Vanes	\$0,470	\$0,470	\$0,470	\$0,000	\$0,000	\$0,470	\$0,470	\$0,000
426D040000400T BCS	\$24,570	\$24,570	\$24,570	\$0,000	\$0,000	\$24,570	\$24,570	\$0,000
426D040000450T LO Ops/Engines	\$0,110	\$0,110	\$0,110	\$0,000	\$0,000	\$0,110	\$0,110	\$0,000
426D040000500T Cockpit Installs I	\$11,770	\$11,770	\$11,770	\$0,000	\$0,000	\$11,770	\$11,770	\$0,000
426D040000540T SMD Lines	\$14,940	\$14,940	\$14,940	\$0,000	\$0,000	\$14,940	\$14,940	\$0,000
426D040000550T Cockpit Installs II	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000

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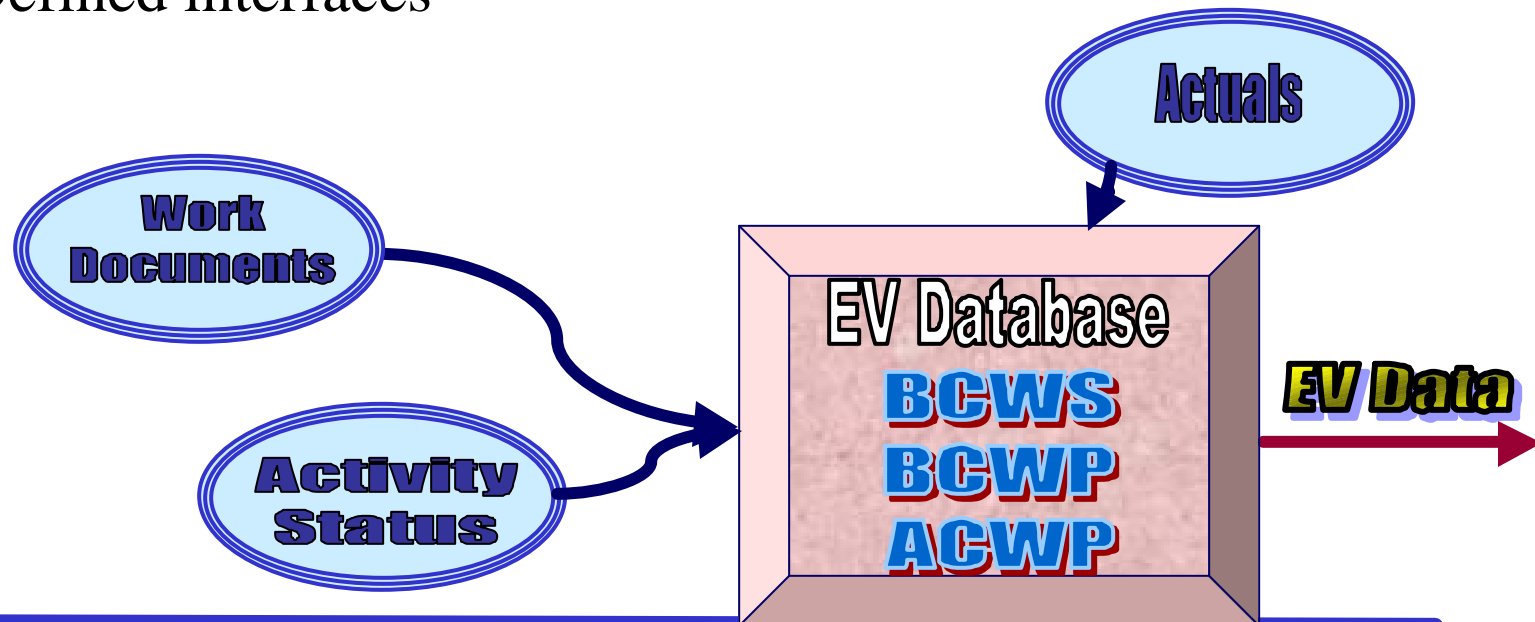


NADEP Jacksonville Earned Value



- *Reliable Data*

- Centralized EV data
- Defined interfaces
- Timeliness required to manage proactively

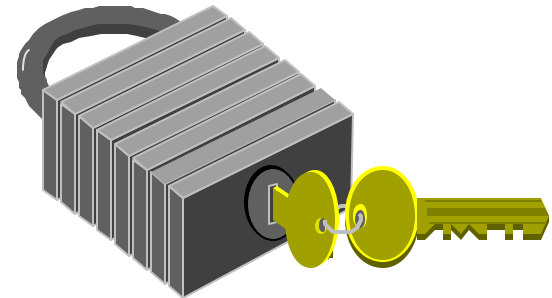




NADEP Jacksonville Earned Value



- *Changed Organizational Culture*
 - Accepted management tool
 - Production floor buy-in
 - CPM Model
 - Variance Analysis at a meaningful level

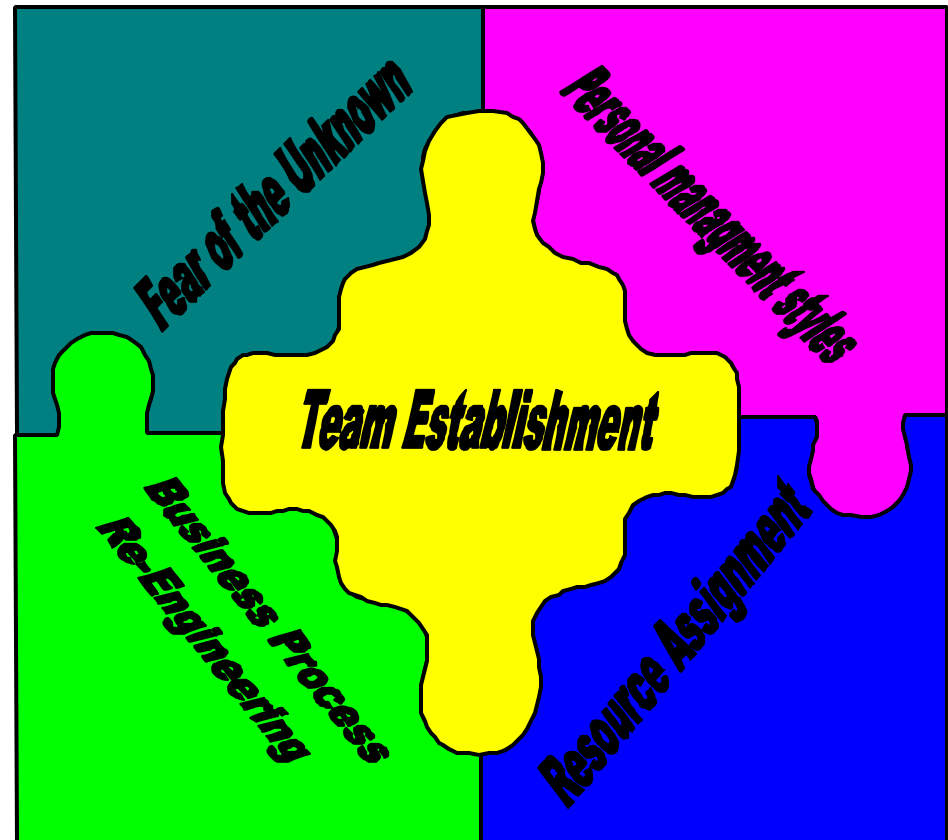




NADEP Jacksonville Earned Value

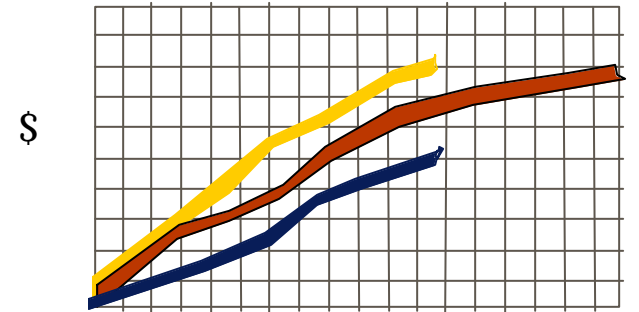
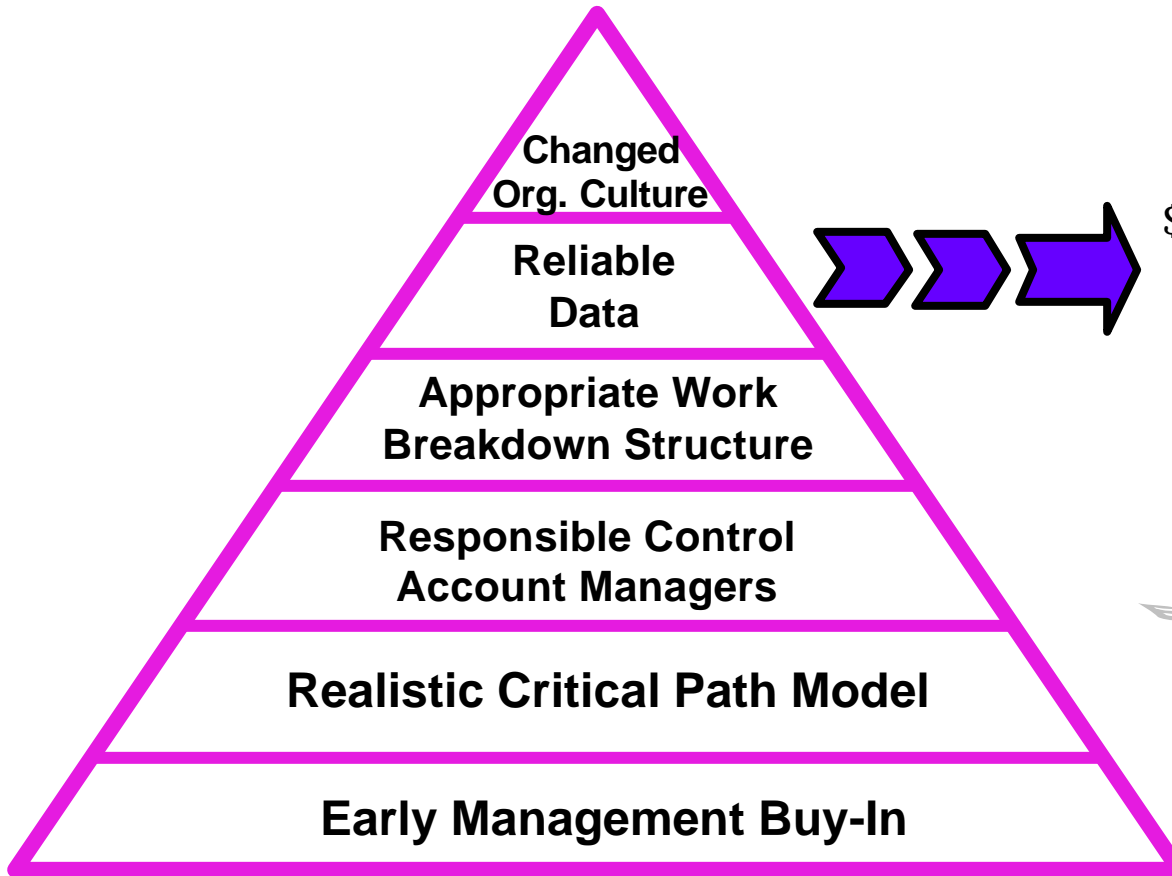


- Evolving process
 - Fear of the unknown
 - Adapting to personal management styles
 - Business Process Re-Engineering
 - Resource assignment
 - Team establishment





NADEP Jacksonville Earned Value



**Earned Value
Management**



NADEP Jacksonville Earned Value





IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

VALIDATION & SURVEILLANCE

Mr. William “Bill” Gibson

Mr. Dominic A. “Chip” Thomas



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

VALIDATION

- **WHY VALIDATE/CERTIFY**
 - **WHO PAYS THE COST**
 - **FACILITY SHOULD PAY**
 - **CUSTOMER SHOULD PAY**
 - **NAVAIR 6.0 WILLING TO PAY FOR IMPLEMENTATION**
 - **WILL NOT PAY FOR CERTIFICATION**
 - **ALBANY WANTS CERTIFICATION FOR COMPETITIVE ADVANTAGE**
- **WHO DOES IN-HOUSE VALIDATION**
 - **NO AUTHORIZATION FOR DCMC**
 - **COULD FALL TO BUYING COMMAND**
 - **IF BUYING COMMAND DOES REVIEW, DCMC MAY LOOK AT FINAL REPORT AND VALIDATE IF NEED BE**



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

• **VALIDATION:** (continued)

- **NO CONSENSUS FOR LESS THAN FULL ACCEPTANCE**
 - **ALL 32 CRITERIA OR NOTHING**
- **NAVAIR HAS SIGNED FOR ACCEPTANCE AND WILL CONTINUE TO SIGN FOR NON-DOD ACCEPTANCE**
 - **FOR SERVICE ONLY ACCEPTANCE**
- **DCMC ONLY ONE TO SIGN FOR DOD ACCEPTANCE**
- **LESSONS LEARNED:**
 - **CAREFULLY EVALUATE IF FULL DOD VALIDATION IS NECESSARY**
 - **THERE IS MORE THAN ONE WAY TO ACHIEVE VALIDATION**



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

• SURVEILLANCE

- **DECIDE EARLY HOW SURVEILLANCE WILL BE ACCOMPLISHED**
 - **ALBANY DECIDED EARLY TO USE IN-HOUSE STAFF**
 - **AT THIS TIME DCMC NOT AUTHORIZED FOR IN-HOUSE SURVEILLANCE**
- **APPROACHES TO ACCOMPLISH SURVEILLANCE**
 - **COULD INCLUDE USE OF METRICS**
 - **UTILIZE IN-HOUSE STAFF**
 - **UTILIZE PROGRAM OFFICE STAFF**
- **BEST PRACTICE**
 - **USE IN-HOUSE STAFF WITH PMO/PEO INVOLVEMENT**



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

VALIDATION & SURVEILLANCE

Mr. William “Bill” Gibson

Mr. Dominic A. “Chip” Thomas



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- Short History of EVMS Validation/Surveillance
- Review all Government plans to complete effort
 - General Order Summary
 - Organization and WBS Structure
 - Responsibility Assignment Matrix
 - Work Authorization Documents
 - Network/Program Schedules
 - Earned Value Methods
 - Cost Account Plans
 - Baseline Maintenance
- How do we do this?
 - CONCERNS:
 - Categorize Concerns



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS:** (continued)
- **Evaluation Events:**
 - **Will All Criteria Be Reviewed?**
 - Incremental Visits
 - As Subsystems Compliance is Completed
 - Full Demonstration
 - When Will They be Ready to Demonstrate
 - Will an IBR be Part of the Process
 - Can IBR be Part of a Demonstration
- **Accounting - Will DCAA be involved????**
 - Recognized, Acceptable, Costing Techniques



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS: (continued)**
- **Material Accounting System - Does It Provide For:**
 - **Accurate Cost Accumulation**
 - **Assignment of Costs to Control Accounts in a Manner Consistent with the Budget**
 - **Cost Performance Measurement at a Point of Time Suitable for Material Involved**
 - **Full Accountability of all Material**
- **Analysis and Management Reports:**
 - **Will Monthly Data/Information be Generated at the Control Account Level**
 - **Will Data be Actual Cost Data from the Accounting System**
 - **What Time Frame can this be Expected**



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS:** (continued)
- **Revisions and Data Maintenance:**
 - Will Authorized Changes be Incorporated in a Timely Manner?
 - Will Retroactive Changes be Controlled?
 - Prevent Revisions to the Program Budget Except for Authorized Changes
 - Insure All Changes Are Documented (UB & MR)
- **Surveillance**
 - How Will It Be Accomplished?
 - Who Will Accomplish System Surveillance?
 - Who Will Accomplish Program Surveillance?
 - Will DCAA do Accounting Surveillance?



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS:** (continued)
- **Data/Information Required:**
 - Will a Detail Presentation of Their Management System be Required?
 - Will Compliance with All 32 Criteria be Required?
 - What Monthly Reports Will Be Required



IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

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Homepage - <http://evms.dcmdw.dla.mil>

IN-HOUSE EVM WORKSHOP
22-23 JUNE 1999

ANALYSIS AND TRAINING
ISSUES AND RECOMMENDATIONS

- ANALYSIS:

1. ISSUE – Level of WBS?

RECOMMENDATION – Depends on level of management. Starts where work is performed and up.

2. ISSUE -- Depot Level Managers not requiring and using EVM information to manage.

RECOMMENDATION – Provide Integrated EVM Education and Training (see Training issue # 1).

3. ISSUE – All EVM customers are not recognized. Example: Operational chain of command.

RECOMMENDATION – Recognize the value of EVM information for ALL customers.

- TRAINING:

1. ISSUE – Government Management incentives. Example: Expenditure Rates.

RECOMMENDATION – A. “Integrated” Training as to the interdependencies of funds, budget, and EVM information in our performance based disciplines.

Example: EVM information includes organization, work authorization, scheduling, planning and budgeting, accounting, performance status (technical, schedule and cost), and analysis – all indicative of budget and funds required for effort accomplished and effort remaining.

RECOMMENDATION – B. Workshops for Users and Customers.

ACTION: DSMC EVM CHAIR – Dave Melton

2. ISSUE – Workforce Education needs to be emphasized.

RECOMMENDATION – Obtain Continuing Education Units (CEU) endorsements from all functional boards. Examples include the BCFM, AMFB, SPRDE, etc.

ACTION: Joni Forman, OUSD(A&T)SA/PM

3. ISSUE – No “One Size Fits All”

RECOMMENDATION –

- A. Target audiences and issues
(Identify Roles and Responsibilities)
- B. Provide Web Based Instruction, Schools, and On Site Training
- C. Train the Trainers
- D. Provide Procedural Training
- E. Provide One and One Training

Government Accounting

- Purpose
 - Process Data and execute transactions
 - Track Expenditure of Appropriated Funds
 - Provide Management Information

Government Accounting

- Structure
 - Data Processing - Centrally controlled DoD system managed by DFAS
 - Tracking Expenditure of Appropriated Funds – Decentralized
 - Management Information – Ad Hoc primarily related to funds tracking

Government Accounting

- Governing Regulatory Requirements
 - Commercial Industry
 - Financial Standards Accounting Board (GAAP)
 - Internal Revenue Service - Tax Accounting
 - DoD - Cost Accounting Standards
 - Government Accounting
 - Appropriation Law and Regulation

Government Accounting

DoD Directive 5000.1b

g. Management Control

.... **“ In implementing internal management control systems, managers shall focus on results, not process”**

Government Accounting

- Intent EVM Accounting Criteria :
 - Record costs consistent with established budgets
 - Insure control of indirect costs
 - Insure disciplined accumulation of cost
 - Insure proper material accounting and performance application

Government Accounting

Issues:

- 1 Is the capability of the Government accounting system compatible with EVM Accounting criteria?
- 2 What specific accounting functions are necessary to provide management data?
- 3 How can Government facilities acquire the necessary accounting capability?
- 4 Who should be responsible for acquiring accounting capability?
- 5 Identify applicable accounting initiatives currently under way

Government Accounting

Summary of Issues:

- 1 Is the capability of the Government accounting system compatible with EVM Accounting criteria?

Yes, this team believed that Government accounting systems are compatible with meeting EVM criteria.

- 2 What specific accounting functions are necessary to provide management data?

A cost charging system that collects by budget element

Historical data storage system that can be accessed for periodic reporting

Government Accounting

Summary of Issues:

3 How can Government facilities acquire the necessary accounting capability?

- By working with the applicable personnel within a facility this capability can be developed, or
- Off line systems can be developed as a last resort

4 Who should be responsible for acquiring accounting capability?

Facility managers, comptrollers, information systems, and program managers must work together to develop this capability